

Release notes for ENDF/B-VII.1 protons sublibrary

December 20, 2011

ERROR SUMMARY

fizcon A LIST record is messed up, I don't know which one: p-014_Si_028.endf, p-082_Pb_207.endf

fizcon A TAB1 (yield?) and an outgoing distribution don't span the same energy region.: p-002_He_003.endf

fizcon All probability distributions should be normalized to 1, this one isn't.: p-004_Be_009.endf, p-013_Al_027.endf, p-014_Si_028.endf, p-014_Si_030.endf, p-015_P_031.endf, p-024_Cr_050.endf, p-024_Cr_052.endf, p-024_Cr_053.endf, p-024_Cr_054.endf, p-028_Ni_058.endf, p-028_Ni_060.endf, p-028_Ni_061.endf, p-028_Ni_062.endf, p-028_Ni_064.endf, p-029_Cu_065.endf, p-041_Nb_093.endf, p-080_Hg_196.endf, p-080_Hg_198.endf, p-080_Hg_199.endf, p-080_Hg_200.endf, p-080_Hg_201.endf, p-080_Hg_202.endf, p-080_Hg_204.endf, p-082_Pb_206.endf, p-082_Pb_207.endf, p-082_Pb_208.endf

fizcon Q value is wrong.: p-004_Be_009.endf

fizcon The cross section and an outgoing distribution don't span the same energy region.: p-001_H_003.endf, p-001_H_003.endf, p-020_Ca_040.endf, p-028_Ni_058.endf, p-029_Cu_063.endf, p-083_Bi_209.endf

fizcon The mass field (AWI) is incorrectly set.: p-001_H_001.endf, p-001_H_002.endf, p-002_He_003.endf, p-004_Be_009.endf, p-006_C_012.endf, p-006_C_013.endf, p-007_N_014.endf, p-008_O_016.endf, p-013_Al_027.endf, p-014_Si_028.endf, p-014_Si_029.endf, p-014_Si_030.endf, p-015_P_031.endf, p-020_Ca_040.endf, p-024_Cr_050.endf, p-024_Cr_052.endf, p-024_Cr_053.endf, p-024_Cr_054.endf, p-026_Fe_054.endf, p-026_Fe_056.endf, p-026_Fe_057.endf, p-028_Ni_058.endf, p-028_Ni_060.endf, p-028_Ni_061.endf, p-028_Ni_062.endf, p-028_Ni_064.endf, p-029_Cu_063.endf, p-029_Cu_065.endf, p-041_Nb_093.endf, p-074_W_182.endf, p-074_W_183.endf, p-074_W_184.endf, p-074_W_186.endf, p-080_Hg_196.endf, p-080_Hg_198.endf, p-080_Hg_199.endf, p-080_Hg_200.endf, p-080_Hg_201.endf, p-080_Hg_202.endf, p-080_Hg_204.endf, p-082_Pb_206.endf, p-082_Pb_207.endf, p-082_Pb_208.endf, p-083_Bi_209.endf

fizcon generic error message: p-006_C_013.endf

fudge Negative multiplicity found: p-020_Ca_040.endf, p-024_Cr_052.endf, p-028_Ni_058.endf

p-001_H_001.endf

- fizcon Errors:

1. The mass field (AWI) is incorrectly set.

ERROR(S) FOUND IN MAT= 125, MF= 1, MT=451
AWI SHOULD BE SET TO 9.98623E-01

SEQUENCE NUMBER 3

p-001_H_002.endf

- fizcon Errors:

1. The mass field (AWI) is incorrectly set.

ERROR(S) FOUND IN MAT= 128, MF= 1, MT=451
AWI SHOULD BE SET TO 9.98623E-01

SEQUENCE NUMBER 3

p-001_H_003.endf

- fizcon Errors:

1. The cross section and an outgoing distribution don't span the same energy region.

ERROR(S) FOUND IN MAT= 131, MF= 6, MT= 50
SECTION DOES NOT SPAN THE SAME ENERGY RANGE AS FILE 3, MT= 50

2. The cross section and an outgoing distribution don't span the same energy region.

ERROR(S) FOUND IN MAT= 131, MF= 3, MT= 2
THE MAXIMUM INCIDENT ENERGY OF 1.20000E+07 (EV)
SHOULD BE GREATER THAN OR EQUAL TO 2.00000E+07

ERROR(S) FOUND IN MAT= 131, MF= 3, MT=650
THE MAXIMUM INCIDENT ENERGY OF 1.20000E+07 (EV)
SHOULD BE GREATER THAN OR EQUAL TO 2.00000E+07

p-002_He_003.endf

- fizcon Errors:

1. A TAB1 (yield?) and an outgoing distribution don't span the same energy region.

ERROR(S) FOUND IN MAT= 225, MF= 6, MT= 2
ENERGY RANGE FOR DISTRIBUTIONS IN LIST RECORDS
INCONSISTENT WITH TAB1 RECORD

SEQUENCE NUMBER 5

2. The mass field (AWI) is incorrectly set.

ERROR(S) FOUND IN MAT= 225, MF= 1, MT=451
AWI SHOULD BE SET TO 9.98623E-01
DIST-DEC06

SEQUENCE NUMBER 3
20111222

p-003_Li_006.endf

- Passed All Checks!

p-003_Li_007.endf

- Passed All Checks!

p-004_Be_009.endf

- fizcon Errors:

1. All probability distributions should be normalized to 1, this one isn't.

ERROR(S) FOUND IN MAT= 409, MF= 6, MT= 5
CHECK NORMALIZATION= 1.000626 AT E= 3.5000E+06 SEQUENCE NUMBER 1092
CHECK NORMALIZATION= 1.000599 AT E= 4.5000E+07 SEQUENCE NUMBER 5067
CHECK NORMALIZATION= 1.000514 AT E= 5.0000E+07 SEQUENCE NUMBER 5075

...

2. Q value is wrong.

ERROR(S) FOUND IN MAT= 409, MF= 3, MT= 50
QI SHOULD BE SET TO 0.00000E+00

SEQUENCE NUMBER 13

3. The mass field (AWI) is incorrectly set.

ERROR(S) FOUND IN MAT= 409, MF= 1, MT=451
AWI SHOULD BE SET TO 9.98623E-01

SEQUENCE NUMBER 3
DIST-DEC06 REV1-

20111222

p-005_B_010.endf

- Passed All Checks!

p-006_C_012.endf

- fizcon Errors:

1. The mass field (AWI) is incorrectly set.

ERROR(S) FOUND IN MAT= 625, MF= 1, MT=451
AWI SHOULD BE SET TO 9.98623E-01

SEQUENCE NUMBER 3

p-006_C_013.endf

- **fizcon Errors:**

1. generic error message

| | | |
|--|-----------------|---|
| ERROR(S) FOUND IN MAT= 628, MF= 6, MT=102 DISCRETE 2-BODY LAW NOT PERMITTED FOR MT= 102 | SEQUENCE NUMBER | 2 |
|--|-----------------|---|

2. The mass field (AWI) is incorrectly set.

| | | |
|---|-----------------|---------------|
| ERROR(S) FOUND IN MAT= 628, MF= 1, MT=451 AWI SHOULD BE SET TO 9.98623E-01 DIST-DEC06 | SEQUENCE NUMBER | 3 20111222 |
|---|-----------------|---------------|

p-007_N_014.endf

- **fizcon Errors:**

1. The mass field (AWI) is incorrectly set.

| | | |
|---|-----------------|---|
| ERROR(S) FOUND IN MAT= 725, MF= 1, MT=451 AWI SHOULD BE SET TO 9.98623E-01 | SEQUENCE NUMBER | 3 |
|---|-----------------|---|

p-008_O_016.endf

- **fizcon Errors:**

1. The mass field (AWI) is incorrectly set.

| | | |
|---|-----------------|---|
| ERROR(S) FOUND IN MAT= 825, MF= 1, MT=451 AWI SHOULD BE SET TO 9.98623E-01 | SEQUENCE NUMBER | 3 |
|---|-----------------|---|

p-013_A1_027.endf

- **fizcon Errors:**

1. All probability distributions should be normalized to 1, this one isn't.

| | | |
|--|-----------------|----|
| ERROR(S) FOUND IN MAT=1325, MF= 6, MT= 2 CHECK NORMALIZATION= 1.000542 AT E= 4.5000E+06 | SEQUENCE NUMBER | 98 |
|--|-----------------|----|

2. The mass field (AWI) is incorrectly set.

| | | |
|---|-----------------|---|
| ERROR(S) FOUND IN MAT=1325, MF= 1, MT=451 AWI SHOULD BE SET TO 9.98623E-01 | SEQUENCE NUMBER | 3 |
|---|-----------------|---|

p-014_Si_028.endf

- **fizcon Errors:**

1. A LIST record is messed up, I don't know which one

```
ERROR(S) FOUND IN MAT=1425, MF= 6, MT= 5
LIST OUT OF ORDER NEAR N=   19                      SEQUENCE NUMBER    18
LIST OUT OF ORDER NEAR N=    2                      SEQUENCE NUMBER   575
LIST OUT OF ORDER NEAR N=   32                      SEQUENCE NUMBER 1431
...

```

2. All probability distributions should be normalized to 1, this one isn't.

```
ERROR(S) FOUND IN MAT=1425, MF= 6, MT= 2
CHECK NORMALIZATION=  1.002029 AT E= 4.8000E+07 SEQUENCE NUMBER   683
```

3. The mass field (AWI) is incorrectly set.

```
ERROR(S) FOUND IN MAT=1425, MF= 1, MT=451
AWI SHOULD BE SET TO  9.98623E-01                  SEQUENCE NUMBER    3
```

p-014_Si_029.endf

- **fizcon Errors:**

1. The mass field (AWI) is incorrectly set.

```
ERROR(S) FOUND IN MAT=1428, MF= 1, MT=451
AWI SHOULD BE SET TO  9.98623E-01                  SEQUENCE NUMBER    3
```

p-014_Si_030.endf

- **fizcon Errors:**

1. All probability distributions should be normalized to 1, this one isn't.

```
ERROR(S) FOUND IN MAT=1431, MF= 6, MT= 2
CHECK NORMALIZATION=  1.000870 AT E= 4.2000E+07 SEQUENCE NUMBER   644
```

2. The mass field (AWI) is incorrectly set.

```
ERROR(S) FOUND IN MAT=1431, MF= 1, MT=451
AWI SHOULD BE SET TO  9.98623E-01                  SEQUENCE NUMBER    3
```

p-015_P_031.endf

- **fizcon Errors:**

1. All probability distributions should be normalized to 1, this one isn't.

```
ERROR(S) FOUND IN MAT=1525, MF= 6, MT= 2
CHECK NORMALIZATION=  0.998554 AT E= 7.0000E+06 SEQUENCE NUMBER   307
```

2. The mass field (AWI) is incorrectly set.

ERROR(S) FOUND IN MAT=1525, MF= 1, MT=451
AWI SHOULD BE SET TO 9.98623E-01

SEQUENCE NUMBER 3

p-020_Ca_040.endf

- **fizcon** Errors:

1. The cross section and an outgoing distribution don't span the same energy region.

ERROR(S) FOUND IN MAT=2025, MF= 6, MT= 5
SECTION DOES NOT SPAN THE SAME ENERGY RANGE AS FILE 3, MT= 5

2. The mass field (AWI) is incorrectly set.

ERROR(S) FOUND IN MAT=2025, MF= 1, MT=451
AWI SHOULD BE SET TO 9.98623E-01

SEQUENCE NUMBER 3

- **fudge** Errors:

1. Negative multiplicity found

WARNING: Negative multiplicity encountered for MF6, MT5 Sc39

p-024_Cr_050.endf

- **fizcon** Errors:

1. All probability distributions should be normalized to 1, this one isn't.

ERROR(S) FOUND IN MAT=2425, MF= 6, MT= 2
CHECK NORMALIZATION= 0.998953 AT E= 2.1000E+07 SEQUENCE NUMBER 507
CHECK NORMALIZATION= 1.001545 AT E= 2.2000E+07 SEQUENCE NUMBER 532

2. The mass field (AWI) is incorrectly set.

ERROR(S) FOUND IN MAT=2425, MF= 1, MT=451
AWI SHOULD BE SET TO 9.98623E-01

SEQUENCE NUMBER 3

p-024_Cr_052.endf

- **fizcon** Errors:

1. All probability distributions should be normalized to 1, this one isn't.

ERROR(S) FOUND IN MAT=2431, MF= 6, MT= 2
CHECK NORMALIZATION= 0.997396 AT E= 2.1000E+07 SEQUENCE NUMBER 507
CHECK NORMALIZATION= 1.000728 AT E= 2.2000E+07 SEQUENCE NUMBER 532

2. The mass field (AWI) is incorrectly set.

```
ERROR(S) FOUND IN MAT=2431, MF= 1, MT=451  
AWI SHOULD BE SET TO 9.98623E-01
```

SEQUENCE NUMBER 3

- fudge Errors:

1. Negative multiplicity found

```
WARNING: Negative multiplicity encountered for MF6, MT5 H1
```

```
WARNING: Negative multiplicity encountered for MF6, MT5 Cr52
```

p-024_Cr_053.endf

- fizcon Errors:

1. All probability distributions should be normalized to 1, this one isn't.

```
ERROR(S) FOUND IN MAT=2434, MF= 6, MT= 2  
CHECK NORMALIZATION= 0.995529 AT E= 2.1000E+07 SEQUENCE NUMBER 507
```

2. The mass field (AWI) is incorrectly set.

```
ERROR(S) FOUND IN MAT=2434, MF= 1, MT=451  
AWI SHOULD BE SET TO 9.98623E-01
```

SEQUENCE NUMBER 3

p-024_Cr_054.endf

- fizcon Errors:

1. All probability distributions should be normalized to 1, this one isn't.

```
ERROR(S) FOUND IN MAT=2437, MF= 6, MT= 2  
CHECK NORMALIZATION= 0.998986 AT E= 2.0000E+07 SEQUENCE NUMBER 482  
CHECK NORMALIZATION= 1.003918 AT E= 2.1000E+07 SEQUENCE NUMBER 507
```

2. The mass field (AWI) is incorrectly set.

```
ERROR(S) FOUND IN MAT=2437, MF= 1, MT=451  
AWI SHOULD BE SET TO 9.98623E-01
```

SEQUENCE NUMBER 3

p-026_Fe_054.endf

- fizcon Errors:

1. The mass field (AWI) is incorrectly set.

ERROR(S) FOUND IN MAT=2625, MF= 1, MT=451
AWI SHOULD BE SET TO 9.98623E-01 SEQUENCE NUMBER 3

p-026_Fe_056.endf

- **fizcon** Errors:

1. The mass field (AWI) is incorrectly set.

ERROR(S) FOUND IN MAT=2631, MF= 1, MT=451
AWI SHOULD BE SET TO 9.98623E-01 SEQUENCE NUMBER 3

p-026_Fe_057.endf

- **fizcon** Errors:

1. The mass field (AWI) is incorrectly set.

ERROR(S) FOUND IN MAT=2634, MF= 1, MT=451
AWI SHOULD BE SET TO 9.98623E-01 SEQUENCE NUMBER 3

p-028_Ni_058.endf

- **fizcon** Errors:

1. The cross section and an outgoing distribution don't span the same energy region.

ERROR(S) FOUND IN MAT=2825, MF= 6, MT= 5
SECTION DOES NOT SPAN THE SAME ENERGY RANGE AS FILE 3, MT= 5

2. All probability distributions should be normalized to 1, this one isn't.

ERROR(S) FOUND IN MAT=2825, MF= 6, MT= 2
CHECK NORMALIZATION= 0.999495 AT E= 2.7000E+07 SEQUENCE NUMBER 657
CHECK NORMALIZATION= 1.005081 AT E= 2.8000E+07 SEQUENCE NUMBER 682
CHECK NORMALIZATION= 1.000503 AT E= 2.9000E+07 SEQUENCE NUMBER 707

3. The mass field (AWI) is incorrectly set.

ERROR(S) FOUND IN MAT=2825, MF= 1, MT=451
AWI SHOULD BE SET TO 9.98623E-01 SEQUENCE NUMBER 3

- **fudge** Errors:

1. Negative multiplicity found

WARNING: Negative multiplicity encountered for MF6, MT5 Cu57

p-028_Ni_060.endf

- fizcon Errors:

1. All probability distributions should be normalized to 1, this one isn't.

| | | |
|--|-----------------|-----|
| ERROR(S) FOUND IN MAT=2831, MF= 6, MT= 2 | | |
| CHECK NORMALIZATION= 0.999454 AT E= 2.6000E+07 | SEQUENCE NUMBER | 632 |
| CHECK NORMALIZATION= 0.998743 AT E= 2.7000E+07 | SEQUENCE NUMBER | 657 |
| CHECK NORMALIZATION= 1.001906 AT E= 2.8000E+07 | SEQUENCE NUMBER | 682 |

2. The mass field (AWI) is incorrectly set.

| | | |
|---|-----------------|---|
| ERROR(S) FOUND IN MAT=2831, MF= 1, MT=451 | | |
| AWI SHOULD BE SET TO 9.98623E-01 | SEQUENCE NUMBER | 3 |

p-028_Ni_061.endf

- fizcon Errors:

1. All probability distributions should be normalized to 1, this one isn't.

| | | |
|--|-----------------|-----|
| ERROR(S) FOUND IN MAT=2834, MF= 6, MT= 2 | | |
| CHECK NORMALIZATION= 1.000959 AT E= 2.8000E+07 | SEQUENCE NUMBER | 682 |

2. The mass field (AWI) is incorrectly set.

| | | |
|---|-----------------|---|
| ERROR(S) FOUND IN MAT=2834, MF= 1, MT=451 | | |
| AWI SHOULD BE SET TO 9.98623E-01 | SEQUENCE NUMBER | 3 |

p-028_Ni_062.endf

- fizcon Errors:

1. All probability distributions should be normalized to 1, this one isn't.

| | | |
|--|-----------------|-----|
| ERROR(S) FOUND IN MAT=2837, MF= 6, MT= 2 | | |
| CHECK NORMALIZATION= 0.998802 AT E= 2.7000E+07 | SEQUENCE NUMBER | 657 |
| CHECK NORMALIZATION= 1.001122 AT E= 2.8000E+07 | SEQUENCE NUMBER | 682 |
| CHECK NORMALIZATION= 1.000543 AT E= 2.9000E+07 | SEQUENCE NUMBER | 707 |

2. The mass field (AWI) is incorrectly set.

| | | |
|---|-----------------|---|
| ERROR(S) FOUND IN MAT=2837, MF= 1, MT=451 | | |
| AWI SHOULD BE SET TO 9.98623E-01 | SEQUENCE NUMBER | 3 |

p-028_Ni_064.endf

- fizcon Errors:

1. All probability distributions should be normalized to 1, this one isn't.

```
ERROR(S) FOUND IN MAT=2843, MF= 6, MT= 2  
CHECK NORMALIZATION= 0.995289 AT E= 2.7000E+07 SEQUENCE NUMBER 657
```

2. The mass field (AWI) is incorrectly set.

```
ERROR(S) FOUND IN MAT=2843, MF= 1, MT=451  
AWI SHOULD BE SET TO 9.98623E-01  
SEQUENCE NUMBER 3
```

p-029_Cu_063.endf

- **fizcon Errors:**

1. The cross section and an outgoing distribution don't span the same energy region.

```
ERROR(S) FOUND IN MAT=2925, MF= 6, MT= 5  
SECTION DOES NOT SPAN THE SAME ENERGY RANGE AS FILE 3, MT= 5
```

2. The mass field (AWI) is incorrectly set.

```
ERROR(S) FOUND IN MAT=2925, MF= 1, MT=451  
AWI SHOULD BE SET TO 9.98623E-01  
SEQUENCE NUMBER 3
```

p-029_Cu_065.endf

- **fizcon Errors:**

1. All probability distributions should be normalized to 1, this one isn't.

```
ERROR(S) FOUND IN MAT=2931, MF= 6, MT= 2  
CHECK NORMALIZATION= 0.999016 AT E= 3.5000E+07 SEQUENCE NUMBER 782
```

2. The mass field (AWI) is incorrectly set.

```
ERROR(S) FOUND IN MAT=2931, MF= 1, MT=451  
AWI SHOULD BE SET TO 9.98623E-01  
SEQUENCE NUMBER 3
```

p-041_Nb_093.endf

- **fizcon Errors:**

1. All probability distributions should be normalized to 1, this one isn't.

```
ERROR(S) FOUND IN MAT=4125, MF= 6, MT= 2  
CHECK NORMALIZATION= 1.003120 AT E= 3.0000E+07 SEQUENCE NUMBER 1057
```

```
ERROR(S) FOUND IN MAT=4125, MF= 6, MT= 5  
CHECK NORMALIZATION= 0.000000 AT E= 2.0000E+06 SEQUENCE NUMBER 1536
```

2. The mass field (AWI) is incorrectly set.

ERROR(S) FOUND IN MAT=4125, MF= 1, MT=451
AWI SHOULD BE SET TO 9.98623E-01

SEQUENCE NUMBER 3

p-074_W_182.endf

- **fizcon Errors:**

1. The mass field (AWI) is incorrectly set.

ERROR(S) FOUND IN MAT=7431, MF= 1, MT=451
AWI SHOULD BE SET TO 9.98623E-01

SEQUENCE NUMBER 3

p-074_W_183.endf

- **fizcon Errors:**

1. The mass field (AWI) is incorrectly set.

ERROR(S) FOUND IN MAT=7434, MF= 1, MT=451
AWI SHOULD BE SET TO 9.98623E-01

SEQUENCE NUMBER 3

p-074_W_184.endf

- **fizcon Errors:**

1. The mass field (AWI) is incorrectly set.

ERROR(S) FOUND IN MAT=7437, MF= 1, MT=451
AWI SHOULD BE SET TO 9.98623E-01

SEQUENCE NUMBER 3

p-074_W_186.endf

- **fizcon Errors:**

1. The mass field (AWI) is incorrectly set.

ERROR(S) FOUND IN MAT=7443, MF= 1, MT=451
AWI SHOULD BE SET TO 9.98623E-01

SEQUENCE NUMBER 3

p-080_Hg_196.endf

- **fizcon Errors:**

1. All probability distributions should be normalized to 1, this one isn't.

```
ERROR(S) FOUND IN MAT=8025, MF= 6, MT= 2
  CHECK NORMALIZATION= 1.001783 AT E= 2.7000E+07 SEQUENCE NUMBER 751
  CHECK NORMALIZATION= 1.000847 AT E= 5.8000E+07 SEQUENCE NUMBER 1712
  CHECK NORMALIZATION= 1.010345 AT E= 5.9000E+07 SEQUENCE NUMBER 1743
...
...
```

2. The mass field (AWI) is incorrectly set.

```
ERROR(S) FOUND IN MAT=8025, MF= 1, MT=451
  AWI SHOULD BE SET TO 9.98623E-01           SEQUENCE NUMBER      3
```

p-080_Hg_198.endf

- **fizcon Errors:**

1. All probability distributions should be normalized to 1, this one isn't.

```
ERROR(S) FOUND IN MAT=8031, MF= 6, MT= 2
  CHECK NORMALIZATION= 1.000533 AT E= 3.1000E+07 SEQUENCE NUMBER 937
  CHECK NORMALIZATION= 1.011887 AT E= 5.9000E+07 SEQUENCE NUMBER 1805
  CHECK NORMALIZATION= 1.000761 AT E= 6.0000E+07 SEQUENCE NUMBER 1836
...
...
```

2. The mass field (AWI) is incorrectly set.

```
ERROR(S) FOUND IN MAT=8031, MF= 1, MT=451
  AWI SHOULD BE SET TO 9.98623E-01           SEQUENCE NUMBER      3
```

p-080_Hg_199.endf

- **fizcon Errors:**

1. All probability distributions should be normalized to 1, this one isn't.

```
ERROR(S) FOUND IN MAT=8034, MF= 6, MT= 2
  CHECK NORMALIZATION= 1.001845 AT E= 2.7000E+07 SEQUENCE NUMBER 813
  CHECK NORMALIZATION= 1.000551 AT E= 2.9000E+07 SEQUENCE NUMBER 875
  CHECK NORMALIZATION= 1.000826 AT E= 3.1000E+07 SEQUENCE NUMBER 937
...
...
```

2. The mass field (AWI) is incorrectly set.

```
ERROR(S) FOUND IN MAT=8034, MF= 1, MT=451
  AWI SHOULD BE SET TO 9.98623E-01           SEQUENCE NUMBER      3
```

p-080_Hg_200.endf

- fizcon Errors:

1. All probability distributions should be normalized to 1, this one isn't.

```
ERROR(S) FOUND IN MAT=8037, MF= 6, MT= 2
  CHECK NORMALIZATION= 0.998462 AT E= 2.7000E+07 SEQUENCE NUMBER 813
  CHECK NORMALIZATION= 1.001317 AT E= 5.8000E+07 SEQUENCE NUMBER 1774
  CHECK NORMALIZATION= 1.009369 AT E= 5.9000E+07 SEQUENCE NUMBER 1805
...

```

2. The mass field (AWI) is incorrectly set.

```
ERROR(S) FOUND IN MAT=8037, MF= 1, MT=451
  AWI SHOULD BE SET TO 9.98623E-01           SEQUENCE NUMBER 3

```

p-080_Hg_201.endf

- fizcon Errors:

1. All probability distributions should be normalized to 1, this one isn't.

```
ERROR(S) FOUND IN MAT=8040, MF= 6, MT= 2
  CHECK NORMALIZATION= 1.001340 AT E= 3.2000E+07 SEQUENCE NUMBER 968
  CHECK NORMALIZATION= 0.997543 AT E= 5.9000E+07 SEQUENCE NUMBER 1805
  CHECK NORMALIZATION= 0.998812 AT E= 6.0000E+07 SEQUENCE NUMBER 1836
...

```

2. The mass field (AWI) is incorrectly set.

```
ERROR(S) FOUND IN MAT=8040, MF= 1, MT=451
  AWI SHOULD BE SET TO 9.98623E-01           SEQUENCE NUMBER 3

```

p-080_Hg_202.endf

- fizcon Errors:

1. All probability distributions should be normalized to 1, this one isn't.

```
ERROR(S) FOUND IN MAT=8043, MF= 6, MT= 2
  CHECK NORMALIZATION= 0.998990 AT E= 2.7000E+07 SEQUENCE NUMBER 813
  CHECK NORMALIZATION= 1.000523 AT E= 2.8000E+07 SEQUENCE NUMBER 844
  CHECK NORMALIZATION= 0.991623 AT E= 5.9000E+07 SEQUENCE NUMBER 1805
...

```

2. The mass field (AWI) is incorrectly set.

```
ERROR(S) FOUND IN MAT=8043, MF= 1, MT=451
  AWI SHOULD BE SET TO 9.98623E-01           SEQUENCE NUMBER 3

```

p-080_Hg_204.endf

- fizcon Errors:

1. All probability distributions should be normalized to 1, this one isn't.

```
ERROR(S) FOUND IN MAT=8049, MF= 6, MT= 2
  CHECK NORMALIZATION= 0.999351 AT E= 2.6000E+07 SEQUENCE NUMBER 782
  CHECK NORMALIZATION= 1.000917 AT E= 2.7000E+07 SEQUENCE NUMBER 813
  CHECK NORMALIZATION= 1.001495 AT E= 5.9000E+07 SEQUENCE NUMBER 1805
  ...
  
```

2. The mass field (AWI) is incorrectly set.

```
ERROR(S) FOUND IN MAT=8049, MF= 1, MT=451
  AWI SHOULD BE SET TO 9.98623E-01           SEQUENCE NUMBER 3
  
```

p-082_Pb_206.endf

- fizcon Errors:

1. All probability distributions should be normalized to 1, this one isn't.

```
ERROR(S) FOUND IN MAT=8231, MF= 6, MT= 2
  CHECK NORMALIZATION= 1.000832 AT E= 3.5000E+07 SEQUENCE NUMBER 241
  CHECK NORMALIZATION= 0.999172 AT E= 4.5000E+07 SEQUENCE NUMBER 267
  
```

```
ERROR(S) FOUND IN MAT=8231, MF= 6, MT= 5
  CHECK NORMALIZATION= 1.005970 AT E= 9.0000E+06 SEQUENCE NUMBER 1434
  
```

2. The mass field (AWI) is incorrectly set.

```
ERROR(S) FOUND IN MAT=8231, MF= 1, MT=451
  AWI SHOULD BE SET TO 9.98623E-01           SEQUENCE NUMBER 3
  
```

p-082_Pb_207.endf

- fizcon Errors:

1. A LIST record is messed up, I don't know which one

```
ERROR(S) FOUND IN MAT=8234, MF= 6, MT= 5
  CHECK NORMALIZATION= 1.166597 AT E= 1.1000E+07 SEQUENCE NUMBER 10598
  LIST OUT OF ORDER NEAR N=      5           SEQUENCE NUMBER 12454
  CHECK NORMALIZATION=***** AT E= 1.5000E+08 SEQUENCE NUMBER 12450
  
```

2. All probability distributions should be normalized to 1, this one isn't.

ERROR(S) FOUND IN MAT=8234, MF= 6, MT= 2
CHECK NORMALIZATION= 1.001106 AT E= 3.5000E+07 SEQUENCE NUMBER 241

3. The mass field (AWI) is incorrectly set.

ERROR(S) FOUND IN MAT=8234, MF= 1, MT=451
AWI SHOULD BE SET TO 9.98623E-01 SEQUENCE NUMBER 3

p-082_Pb_208.endf

- **fizcon Errors:**

1. All probability distributions should be normalized to 1, this one isn't.

ERROR(S) FOUND IN MAT=8237, MF= 6, MT= 5
CHECK NORMALIZATION= 1.262763 AT E= 1.2000E+07 SEQUENCE NUMBER 9563
SECTION DOES NOT SPAN THE SAME ENERGY RANGE AS FILE 3, MT= 5

2. The mass field (AWI) is incorrectly set.

ERROR(S) FOUND IN MAT=8237, MF= 1, MT=451
AWI SHOULD BE SET TO 9.98623E-01 SEQUENCE NUMBER 3

p-083_Bi_209.endf

- **fizcon Errors:**

1. The cross section and an outgoing distribution don't span the same energy region.

ERROR(S) FOUND IN MAT=8325, MF= 6, MT= 5
SECTION DOES NOT SPAN THE SAME ENERGY RANGE AS FILE 3, MT= 5

2. The mass field (AWI) is incorrectly set.

ERROR(S) FOUND IN MAT=8325, MF= 1, MT=451
AWI SHOULD BE SET TO 9.98623E-01 SEQUENCE NUMBER 3